

5 **What Is Claimed Is:**

1. An information service system for providing interruption-free information access service to a plurality of users communicating to said system via a communications network, said system comprising:

a main program subsystem executing a main program for providing said information access service to said users by receiving I/O access requests issued by said users;

10 an information storage subsystem for storing information required for implementing said information service; and

15 an I/O access agent subsystem processing said I/O access requests issued by said users by registering said requests received by said main program subsystem and submitting said received requests to said information storage subsystem for implementing the read or write accesses corresponding to said requests, said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said users upon completion of said submitted requests.

20 2. The information service system of claim 1, wherein said information storage subsystem comprises at least one information storage means integrated for providing information storage functionality as a whole for said information service.

25 3. The information service system of claim 2, wherein each of said at least one information storage means is a disk-based storage device.

4. The information service system of claim 2, wherein each of said at least one information storage means is an information storage server.

30 5. The information service system of claim 2, wherein each of said at least one information storage means is a server cluster including at least one server connected in a local area network.

6. The information service system of claim 1, wherein said I/O access agent subsystem comprises at least an I/O access agent module integrated for implementing said registering and submission of said requests as a whole for said information service.

7. The information service system of claim 1, wherein said main program subsystem comprises at least a main program module integrated for receiving said I/O access requests issued by said users as a whole for said information service.

8. An on-line game information service system for providing interruption-free game information access service to a plurality of game players communicating to said system via Internet, said system comprising:

a main program subsystem executing a main program for providing said game information access service to said players by receiving I/O access requests issued by said players;

an information storage subsystem for storing game information required for implementing said game information service; and

an I/O access agent subsystem processing said I/O access requests issued by said players by registering said requests received by said main program subsystem and submitting said received requests to said game information storage subsystem for implementing the read or write accesses corresponding to said requests, said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said players upon completion of said submitted requests.

9. The on-line game information service system of claim 8, wherein said information storage subsystem comprises at least one information storage means integrated for providing information storage functionality as a whole for said information service.

10. The on-line game information service system of claim 9, wherein each of said at least one information storage means is a disk-based storage device.

11. The on-line game information service system of claim 9, wherein each of said at least one information storage means is an information storage server.

12. The on-line game information service system of claim 8, wherein each of said at least one information storage means is a server cluster including at least one server connected in a local area network.

13. The on-line game information service system of claim 9, wherein one of said at least one information storage means stores player identification information for said game information service system.

14. The on-line game information service system of claim 9, wherein one of said at least one information storage means stores game virtual geological information for said game information service system.

15. The on-line game information service system of claim 9, wherein one of said at least one information storage means stores game player game status information for said game information service system.

20 16. The on-line game information service system of claim 8, wherein said I/O access agent subsystem comprises at least an I/O access agent module integrated for implementing said registering and submission of said requests as a whole for said information service.

25 17. The on-line game information service system of claim 8, wherein said main program subsystem comprises at least a main program module integrated for providing said game information access service to said as a whole for said information service.

30 18. The on-line game information service system of claim 16, wherein one of said at least one I/O access agent module implementing said registering and submission of said requests in relation to game player identification information for said game

information service system.

19. The on-line game information service system of claim 16, wherein one of
said at least one I/O access agent module implementing said registering and submission
5 of said requests in relation to game virtual geological information for said game
information service system.

20. The on-line game information service system of claim 16, wherein one of
said at least one I/O access agent module implementing said registering and submission
10 of said requests in relation to game player game status information for said game
information service system.

21. The on-line game information service system of claim 17, wherein said main
program subsystem comprises at least a main program module integrated for receiving
said I/O access requests issued by said users as a whole for said information service.

22. The on-line game information service system of claim 21, wherein one of
said at least one main program module implementing said receiving of said requests in
relation to game player identification information for said game information service
20 system.

23. The on-line game information service system of claim 21, wherein one of
said at least one main program module implementing said receiving of said requests in
relation to game virtual geological information for said game information service
25 system.

24. The on-line game information service system of claim 21, wherein one of
said at least one main program module implementing said receiving of said requests in
relation to game player game status information for said game information service
30 system.

25. A method for providing interruption-free file access service to users communicating to an information service via a communications network in an information service system comprising a main program subsystem, an information storage subsystem and an I/O access agent subsystem, said method comprising the steps of:

a) said main program subsystem registering information access requests issued by said users in a list and submitting said requests to said I/O access agent subsystem;

10 b) said I/O access agent subsystem submitting said requests issued by said users to the information subsystem for implementing read or write accesses corresponding to said requests; and

15 c) said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said users upon completion of access of said submitted requests by said information storage subsystem, wherein said information service system continuing said information service for said users before said completion of an I/O access that is pending.

26. A method for providing interruption-free file access service to game players communicating to an on-line game information service via Internet in an on-line game information service system comprising a main program subsystem, an information storage subsystem and an I/O access agent subsystem, said method comprising the steps of:

25 a) said main program subsystem registering information access requests issued by said game players in a list and submitting said requests to said I/O access agent subsystem;

b) said I/O access agent subsystem submitting said requests issued by said game players to the information subsystem for implementing read or write accesses corresponding to said requests; and

30 c) said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said game players upon completion of access of said submitted requests by said information storage subsystem, wherein said on-line game information service system continuing said on-line game information service for

said game players before said completion of an I/O access that is pending.